SPP-AQ600

SONY

US Model

Serial No.895,007 and later

SERVICE MANUAL

SUPPLEMENT - 3

File this Supplement with the Service Manual.

Subject : Change of DSP Board

(ECN-CP800637)

1. PRINTED WIRING BOARD (DSP BOARD)

- **Semiconductor Location**

Ref. No.	Location
D401	I-1
D402	G-2
IC401	H-3
IC402	E-4
IC403	E-2
IC406	I-2
Q401	C-2
Q402	H-1

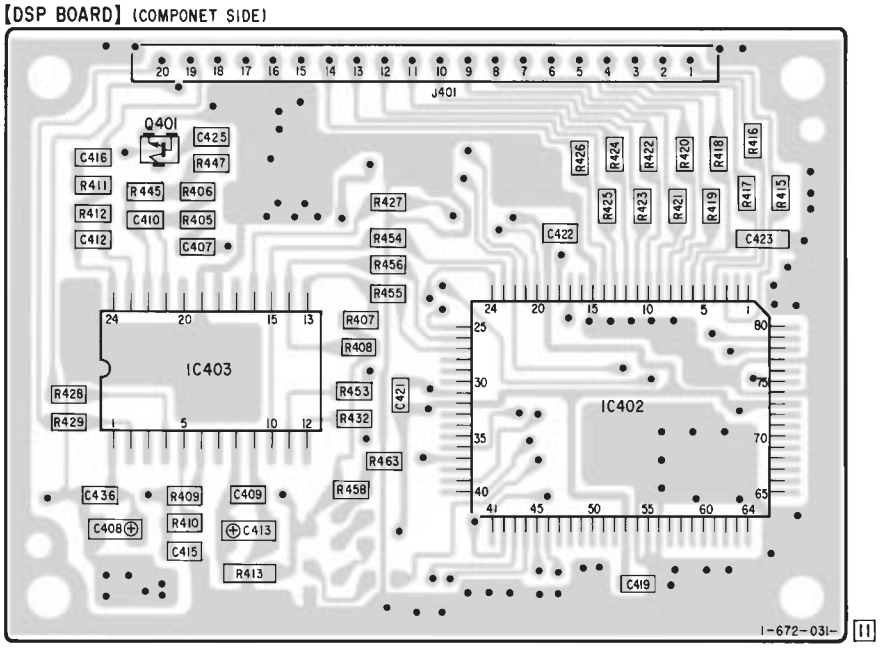
Note:

- ○——— : parts extracted from the component side.
- ● : Through hole.
- ▒▒▒ : Pattern on the side which is seen.

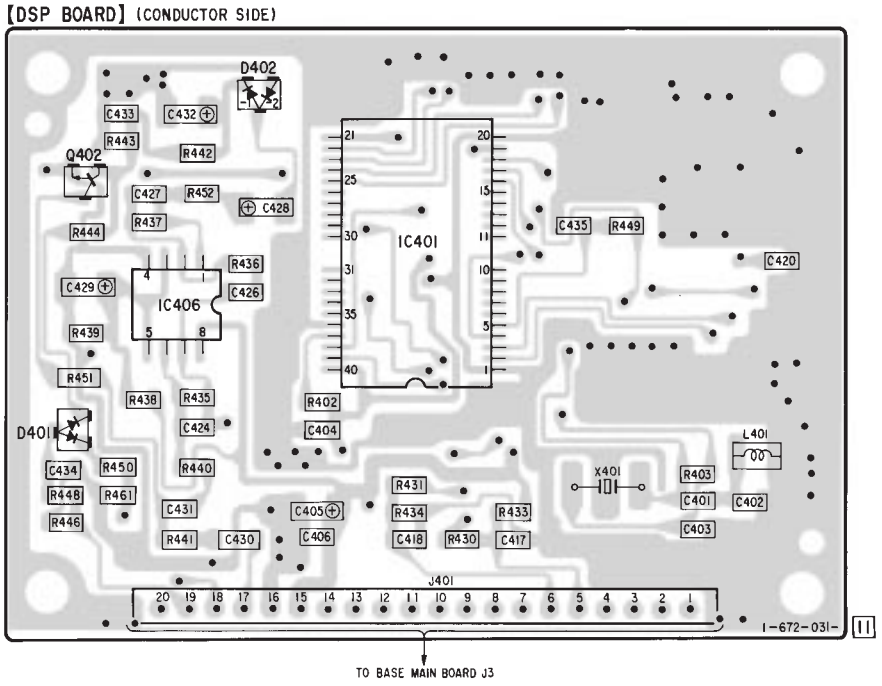
Caution:

Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

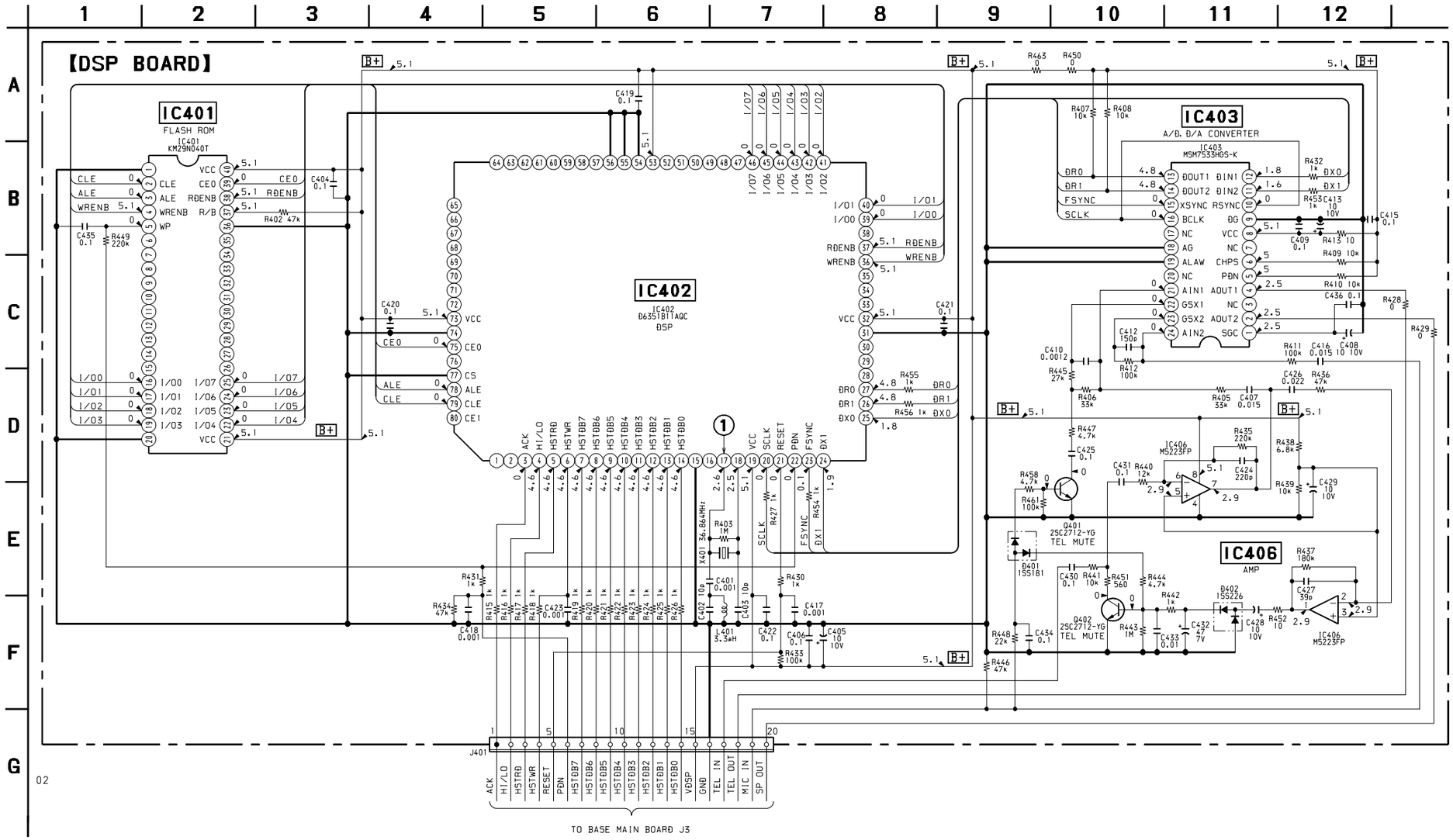
【DSP BOARD】(COMPONET SIDE)



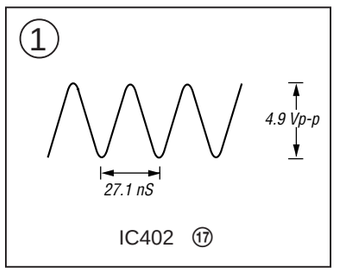
【DSP BOARD】(CONDUCTOR SIDE)



2. SCHEMATIC DIAGRAM (DSP BOARD)



● **Waveform**



Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- B+ : B+ Line.
- Power voltage is dc 9V and fed with regulated dc power supply from external power voltage jack.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : TALK
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.

DSP

DSP

3. ELECTRICAL PARTS LIST

NOTE :

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE :Metal oxide-film resistor
  F : nonflammable
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ , for example :
  uA.... : µ A.... , uPA.... : µ PA....
  uPB.... : µ PB.... , uPC.... : µ PC....
  uPD.... : µ PD....
- CAPACITORS
  uF : µ F
- COILS
  uH : µ H

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
	A-4672-651-A	DSP BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C401	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C402	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C403	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C404	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C405	1-104-851-11	TANTAL. CHIP	10uF	20%	10V
C406	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C407	1-163-023-00	CERAMIC CHIP	0.015uF	5%	50V
C408	1-104-851-11	TANTAL. CHIP	10uF	20%	10V
C409	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C410	1-163-010-11	CERAMIC CHIP	0.0012uF	10%	50V
C412	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C413	1-104-851-11	TANTAL. CHIP	10uF	20%	10V
C415	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C416	1-163-023-00	CERAMIC CHIP	0.015uF	5%	50V
C417	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C418	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C419	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C420	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C421	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C422	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C423	1-163-205-11	CERAMIC CHIP	0.001uF	5%	50V
C424	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C425	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C426	1-163-037-11	CERAMIC CHIP	0.022uF	10%	50V
C427	1-163-241-11	CERAMIC CHIP	39PF	5%	50V
C428	1-104-851-11	TANTAL. CHIP	10uF	20%	10V
C429	1-104-851-11	TANTAL. CHIP	10uF	20%	10V
C430	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C431	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C432	1-110-569-11	TANTAL. CHIP	47uF	20%	6.3V
C433	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C434	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C435	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C436	1-165-319-11	CERAMIC CHIP	0.1uF		50V
		< DIODE >			
D401	8-719-820-05	DIODE 1SS181			
D402	8-719-800-76	DIODE 1SS226			

Ref. No.	Part No.	Description			Remark
		< IC >			
IC401	8-759-452-48	IC KM29N040T-UD391			
IC402	8-759-567-48	IC D6351B11AQC			
IC403	8-759-461-16	IC MSM7533HGS-KR1			
IC406	8-759-635-21	IC M5223FP			
		< CONNECTOR >			
J401	1-779-053-11	PIN, CONNECTOR 20P			
		< COIL >			
L401	1-410-375-11	INDUCTOR CHIP 3.3uH			
		< TRANSISTOR >			
Q401	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q402	8-729-230-49	TRANSISTOR 2SC2712-YG			
		< RESISTOR >			
R402	1-216-089-00	METAL CHIP	47K	5%	1/10W
R403	1-216-121-00	METAL CHIP	1M	5%	1/10W
R405	1-216-085-00	METAL CHIP	33K	5%	1/10W
R406	1-216-085-00	METAL CHIP	33K	5%	1/10W
R407	1-216-073-00	METAL CHIP	10K	5%	1/10W
R408	1-216-073-00	METAL CHIP	10K	5%	1/10W
R409	1-216-073-00	METAL CHIP	10K	5%	1/10W
R410	1-216-073-00	METAL CHIP	10K	5%	1/10W
R411	1-216-097-00	METAL CHIP	100K	5%	1/10W
R412	1-216-097-00	METAL CHIP	100K	5%	1/10W
R413	1-216-150-00	METAL CHIP	10	5%	1/8W
R415	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R416	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R417	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R418	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R419	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R420	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R421	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R422	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R423	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R424	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R425	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R426	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R427	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R428	1-216-295-00	METAL CHIP	0	5%	1/10W

Ref. No.	Part No.	Description			Remark
R429	1-216-295-00	METAL CHIP	0	5%	1/10W
R430	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R431	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R432	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R433	1-216-097-00	METAL CHIP	100K	5%	1/10W
R434	1-216-089-00	METAL CHIP	47K	5%	1/10W
R435	1-216-105-00	METAL CHIP	220K	5%	1/10W
R436	1-216-089-00	METAL CHIP	47K	5%	1/10W
R437	1-216-103-00	METAL CHIP	180K	5%	1/10W
R438	1-216-069-11	METAL CHIP	6.8K	5%	1/10W
R439	1-216-073-00	METAL CHIP	10K	5%	1/10W
R440	1-216-075-00	METAL CHIP	12K	5%	1/10W
R441	1-216-073-00	METAL CHIP	10K	5%	1/10W
R442	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R443	1-216-121-00	METAL CHIP	1M	5%	1/10W
R444	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R445	1-216-083-00	METAL CHIP	27K	5%	1/10W
R446	1-216-089-00	METAL CHIP	47K	5%	1/10W
R447	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R448	1-216-081-00	METAL CHIP	22K	5%	1/10W
R449	1-216-105-00	METAL CHIP	220K	5%	1/10W
R450	1-216-295-00	METAL CHIP	0	5%	1/10W
R451	1-216-192-00	METAL CHIP	560	5%	1/8W
R452	1-216-001-00	METAL CHIP	10	5%	1/10W
R453	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R454	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R455	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R456	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R458	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R461	1-216-097-00	METAL CHIP	100K	5%	1/10W
R463	1-216-295-00	METAL CHIP	0	5%	1/10W
		< VIBRATOR >			
X401	1-767-407-11	VIBRATOR, CRYSTAL (36.864MHz)			

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